



Application No. 10/716,199
Amendment dated April 28, 2008
Response to Final Office Action mailed January 28, 2008
(Submitted with RCE)

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): An image processing method for processing an image using image data produced by an image producing device, and image production record information which includes at least information relating to shooting conditions at the time of production of the image data, and which is associated with the image data, the method comprising ~~the~~ steps of:

(a) performing color balance adjustment processing of the image data, wherein the image production record information includes subject distance information relating to a distance between the image producing device and the subject of the image data at the time of the production of the image data, and wherein the step (a) performing includes the steps of:

~~in cases where the image production record information includes subject distance information relating to a distance between the image producing device and the subject of the image data at the time of the production of the image data,~~

(i) determining differences of respective color components of pixels that have colors close to a present memory color from respective color components of a preset target color in the image data by analyzing the image data; and

(ii) ~~adjusting a processing amount of the color balance adjustment processing in accordance with the differences and the subject distance information, and wherein the step (ii) adjusting includes the steps of~~ including adjusting a proportion of the processing amount of the color balance adjustment processing with respect to the differences so that the proportion is large ~~when~~ in cases where the distance represented by the subject distance information is small.

Claim 2 (Original): An image processing method according to claim 1, wherein the color balance adjustment processing is performed for the entirety of the image.

Claim 3 (Canceled).

Claim 4 (Currently Amended): An image processing method according to claim 1, wherein the image production record information includes lens focal distance information relating to a lens focal distance of the image producing device at the time of the production of the image data, and the step (a) performing includes ~~the step of~~ performing the color balance adjustment processing using the lens focal distance information obtained from the image production record information in cases where the image production record information includes the lens focal distance information relating to a lens focal distance of the image producing device at the time of the production of the image data.

Claim 5 (Currently Amended): An image processing method according to claim 1, wherein the ~~step (a) performing~~ includes ~~the steps of:~~

calculating a proportion of pixels that have a color close to a preset memory color by analyzing the image data; and

performing the color balance adjustment processing using the proportion of pixels.

Claim 6 (Currently Amended): An image processing method according to claim 4, wherein the ~~step (b) of performing of~~ the color balance adjustment processing using the lens focal distance information includes ~~the step of~~ adjusting a processing amount of the color balance adjustment processing so that the processing amount is large ~~when~~ in cases where the lens focal distance represented by the lens focal distance information is large.

Claim 7 (Canceled).

Claim 8 (Currently Amended): An image processing method according to claim 1, wherein the method further comprises ~~the steps of:~~

judging whether or not operating settings of the image producing device at the time of the production of the image data are suitably set for portrait images by analyzing the image production record information in cases where the image production record information includes shooting mode information relating to the operating settings; and

performing the ~~step (a) color balance adjustment processing of the image data~~ in cases where the judgment is affirmative.

Claim 9 (Currently Amended): An image processing device for processing an image using image data produced by an image producing device, and image production record information which includes at least information relating to shooting conditions at the time of production of the image data, and which is associated with the image data, the image processing device comprising:

an image adjuster configured to perform color balance adjustment processing of the image data, wherein ~~in cases where~~ the image production record information includes subject distance information relating to a distance between the image producing device and the subject of the image data at the time of the production of the image data, and the image adjuster performs:

(i) determining differences of respective color components of pixels that have colors close to a preset memory color from respective color components of a preset target color in the image data by analyzing the image data; and

(ii) adjusting a processing amount of the color balance adjustment processing in accordance with the differences and the subject distance information,

and wherein the ~~step (ii) adjusting~~ includes ~~the step of~~ adjusting a proportion of the processing amount of the color balance adjustment processing with respect to the differences so that the proportion is large ~~when~~ in cases where the distance represented by the subject distance information is small.

Claim 10 (Currently Amended): A computer program product which is used to process an image using image data produced by an image producing device and image production record information which includes at least information relating to shooting conditions at the time of production of the image data, and which is associated with the image data, the computer program product comprising:

a computer-readable storage medium; and

a computer program stored on the computer-readable storage medium;

wherein the computer program causes a computer to implement a method comprising ~~the step of:~~

(a) performing color balance adjustment processing of the image data, wherein the image production record information includes subject distance information relating to a distance between the image producing device and the subject of the image data at the time of the production of the image data, and wherein the step (a) performing includes the steps of:

~~in cases where the image production record information includes subject distance information relating to a distance between the image producing device and the subject of the image data at the time of the production of the image data,~~

(i) determining differences of respective color components of pixels that have colors close to a preset memory color from respective color components of a present target color in the image data by analyzing the image data; and

(ii) adjusting a processing amount of the color balance adjustment processing in accordance with the differences and the subject distance information,

and wherein the ~~step (ii) adjusting~~ includes ~~the step of~~ adjusting a proportion of the processing amount of the color balance adjustment processing with respect to the differences so that the proportion is large ~~when~~ in cases where the distance represented by the subject distance information is small.

Claim 11 (Currently Amended): An image output device for outputting an image using image data produced by an image producing device, and image production record information which includes at least information relating to shooting conditions at the time of production of the image data, and which is associated with the image data, the image output device comprising:

an image adjuster configured to perform color balance adjustment processing of the image data; and

an output unit which outputs an image using the image data whose color balance has been adjusted, wherein ~~in cases where~~ the image production record information includes subject distance information relating to a distance between the image producing device and the subject of the image data at the time of the production of the image data, and the image adjuster performs:

(i) determining differences of respective color components of pixels that have colors close to a preset memory color from respective color components of a preset target color in the image data by analyzing the image data; and

(ii) adjusting a processing amount of the color balance adjustment processing in accordance with the differences and the subject distance information,

and wherein the ~~step (ii) adjusting~~ includes ~~the step of~~ adjusting a proportion of the processing amount of the color balance adjustment processing with respect to the differences so that the proportion is large ~~when~~ in cases where the distance represented by the subject distance information is small.